

# MBOGC Online Data Application

This application is a re-build of the Board's original online data system utilizing Microsoft .Net.

- **Pop-up blockers need to be disabled or pop-ups allowed for the MBOGC website** in order to export data.
- **Cookies must be enabled.**
- **Printing directly from the application is not supported** except in the case of production plots within the CBM section. Data should be exported and formatted by the prior to printing.

## Quick Links

[Overview](#)

[Accessing the System](#)

[Basic Navigation](#)

[Multiple Well Search](#)

[Board Order Search](#)

[Additional Features](#)

[Advanced Search](#)

[Township-Range-Section Filter](#)

[Exporting Data](#)

[Printing](#)

[Advanced Filtering](#)

## Overview

Each tab has an overview page that describes the basic functions of the underlying forms. This can be used to determine which of the forms is best for your purpose. However, here are some hints:

**Well Data:** if your intent is to find basic data for wells in a larger area such as in one or more townships, a field, or a county the best place to start would be the Multiple Well Search / Well Search form. This form also provides the best method of exporting a filtered well list displaying basic well header information.

Alternatively, if more complete data including formation tops, well history, or production for a set of wells in a given township, range and section, a township, or a small field is required, the Well Search form is best.

**Production Data:** Normally the Well Search form is the best way to view production data for a well or small set of wells. However, the same functionality is available under the Well Production Data form under the Production grouping. The advantage of the Well Search form is that additional well history and formation data are present that are not available on the production tab.

There are also a number of options for viewing production data under the Grouped Production Level of the Production tab.

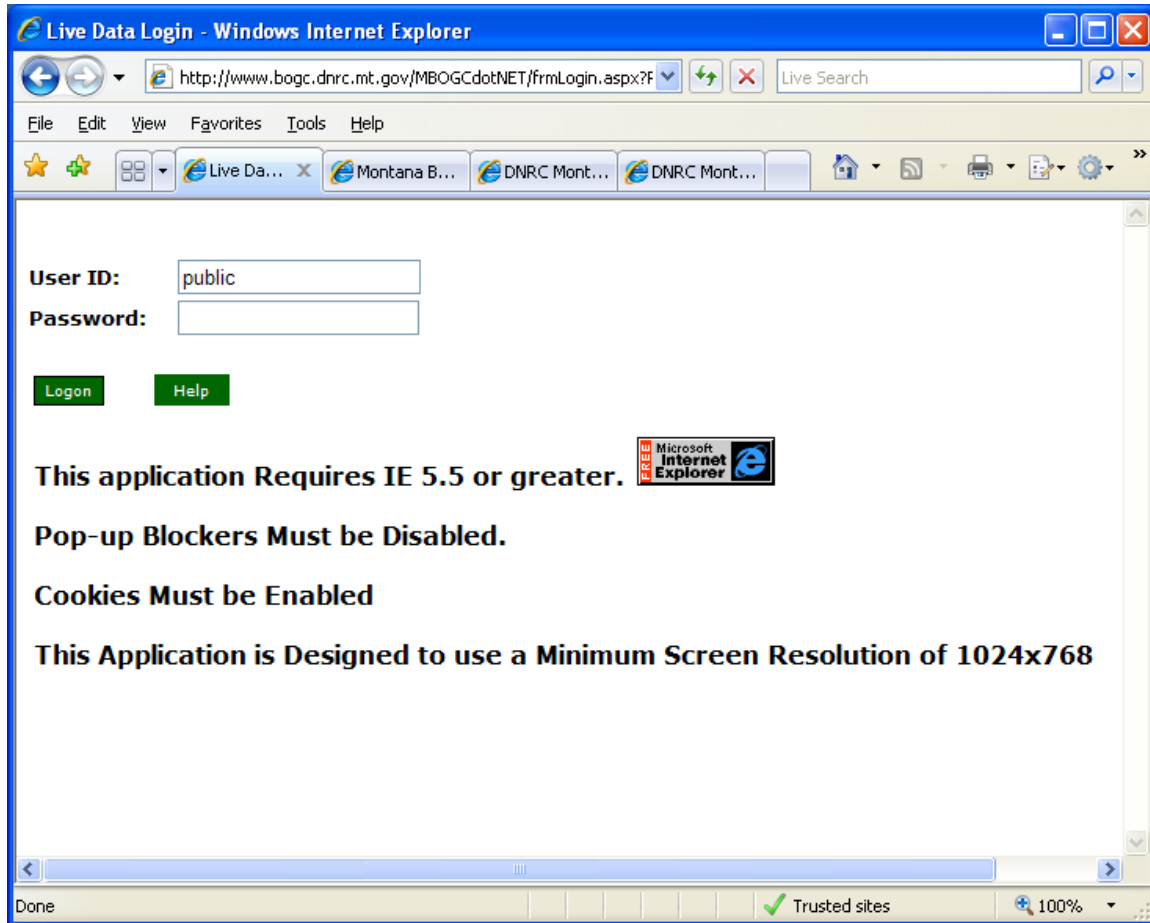
**Lease and Sales Information:** Production is reported by well and sales are reported by lease. Leases are identified by a unique property number related to revenue filing and this number is required to do searches. The "Lease Wells" form can be used to find lease numbers for the subsequent filtering to lease production and lease purchasers.

**Well Longitude and Latitude:** Longitude and latitude for all wells is available under "Wells" and "Well Long/Lat". Since this is a rather large file the download time can be excessive, but it is possible to filter to all the wells in a given county which will result in a quicker download. Well locations are also available in tabular form in the file named Well\_Surface.tab at this address:

[http://bogc.dnrc.state.mt.us/annualreview/MTOG\\_GIS\\_Data/](http://bogc.dnrc.state.mt.us/annualreview/MTOG_GIS_Data/)

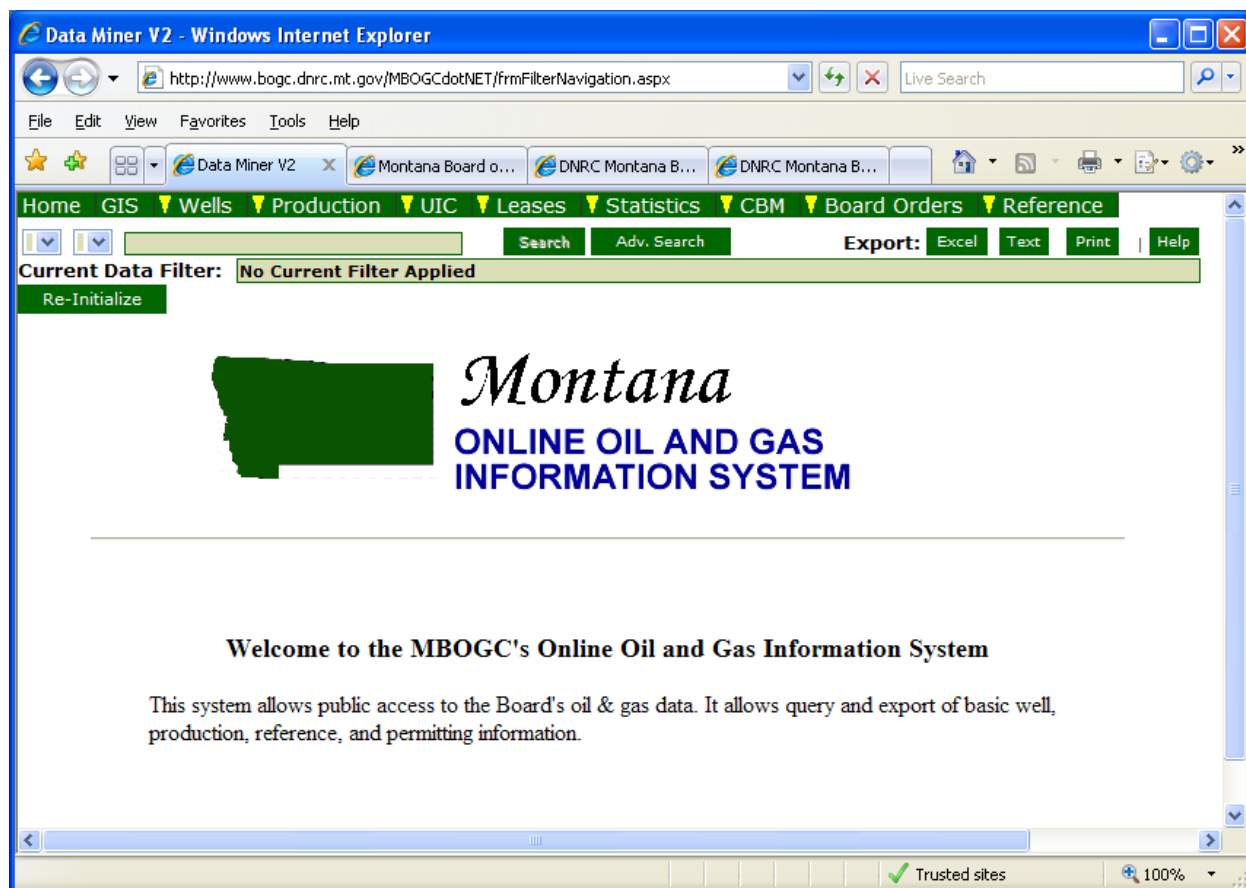
# Accessing the Online System

## Introduction and Log-in



Click the "Ligon" button with public as the user and a blank password box to enter the system.

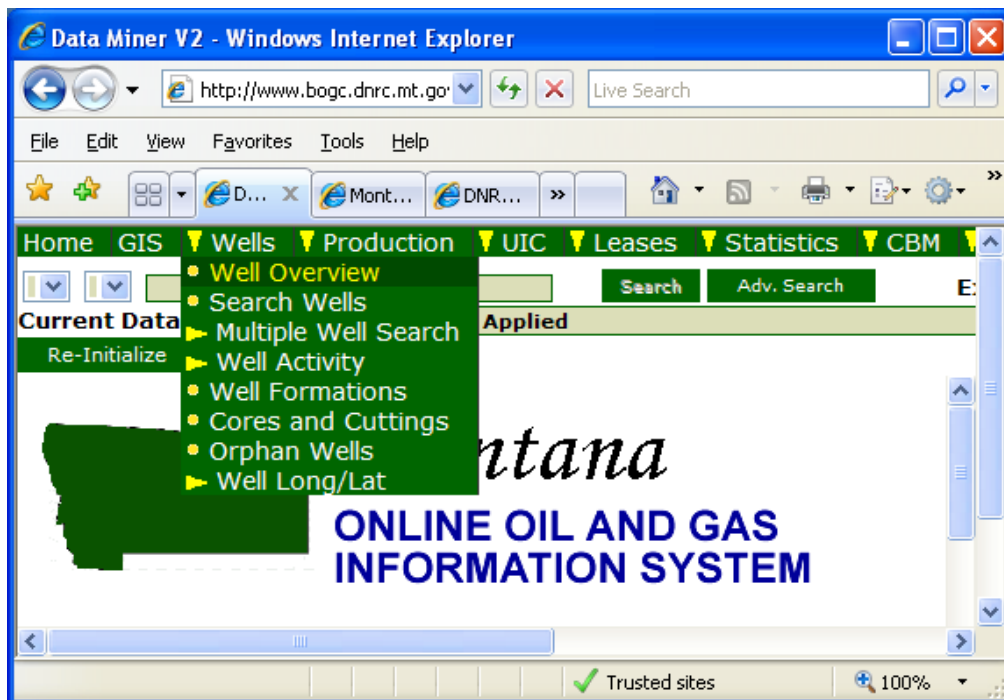
## Start-up Screen



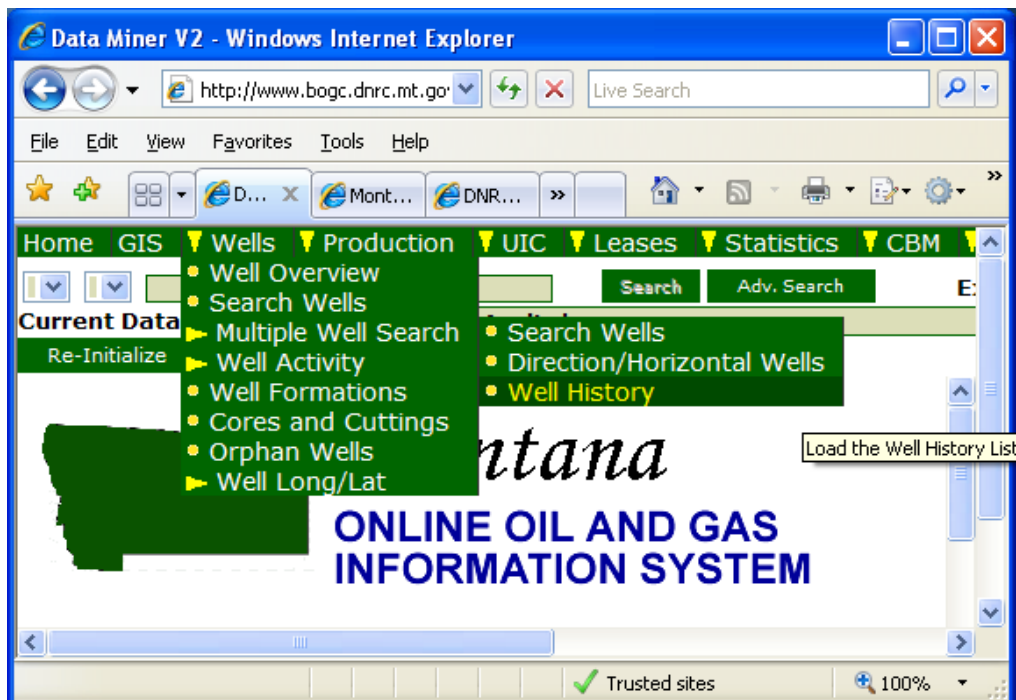
The application loads with the screen shown above. The tabs located at the top of the screen are used for navigation and available data are grouped by category, such as Wells, Production, UIC, Leases, etc.

To advance to a data screen place the mouse over one of the tab headings to expand the menu list.

## BASIC NAVIGATION



Moving the mouse cursor to a data category opens a list of data options. Menu entries identified with a "\*" or dot indicate a single form option, while those preceded by a ">" indicate another level of menus below the current level as shown below.



Clicking an entry on highest menu level will open a form and activate the filter options.

## Multiple Well Search / Search Wells Form

This form is the basic form used to derive a list of wells matching some filter criteria and will be used to demonstrate filtering.

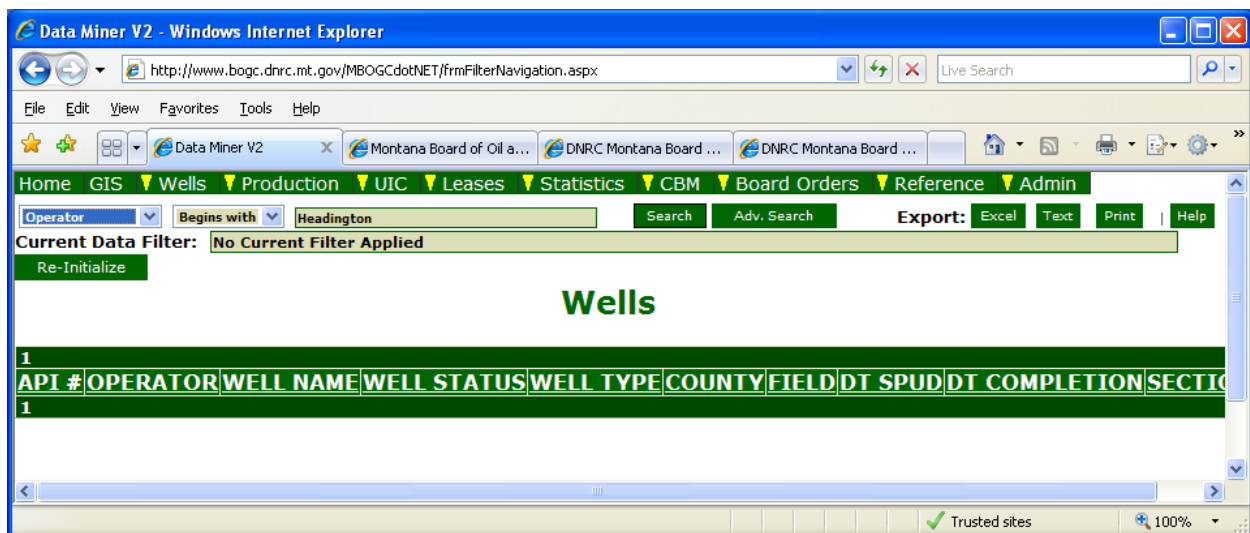
Filter criteria are selected using the drop box located in the upper left corner of the screen below the tabs.

The screenshot shows the 'Data Miner V2' web application in a Windows Internet Explorer browser. The address bar displays the URL: <http://www.bogc.dnrc.mt.gov/MBOGCdotNET/frnFilterNavigation.aspx>. The application has a navigation menu with tabs: Home, GIS, Wells, Production, UIC, Leases, Statistics, CBM, Board Orders, Reference, and Admin. Below the tabs, there is a search area with a dropdown menu for 'API#' and a text input field for 'Begins with'. The dropdown menu is expanded, showing a list of filter options: API#, Operator, Well Name, Well Type, Well Status, Field, County, Location (T-R), Location (T-R-S), Slant, Section, TD, District, Next Inspection, and Lease #. The 'Operator' option is selected. To the right of the search area, there are buttons for 'Search', 'Adv. Search', and 'Export' (with sub-buttons for Excel, Text, Print, and Help). Below the search area, there is a message: 'No Current Filter Applied'. The main content area displays the word 'Wells' in a large green font. Below this, there is a table header with columns: API #, OPERATOR, WELL NAME, WELL STATUS, WELL TYPE, COUNTY, FIELD, DT SPUD, DT COMPLETION, and SECTION.

In this screen shot the filter box has been expanded to show the available filter options and "Operator" has been selected.

The screenshot shows the 'Data Miner V2' web application in a Windows Internet Explorer browser. The address bar displays the URL: <http://www.bogc.dnrc.mt.gov/MBOGCdotNET/frnFilterNavigation.aspx>. The application has a navigation menu with tabs: Home, GIS, Wells, Production, UIC, Leases, Statistics, CBM, Board Orders, Reference, and Admin. Below the tabs, there is a search area with a dropdown menu for 'Operator' and a text input field for 'Begins with'. The dropdown menu is expanded, showing a list of filter options: API#, Operator, Well Name, Well Type, Well Status, Field, County, Location (T-R), Location (T-R-S), Slant, Section, TD, District, Next Inspection, and Lease #. The 'Operator' option is selected. To the right of the search area, there are buttons for 'Search', 'Adv. Search', and 'Export' (with sub-buttons for Excel, Text, Print, and Help). Below the search area, there is a message: 'Current Data Filter: Begins with'. Below this, there is a button for 'Re-Initialize'. The main content area displays the word 'Wells' in a large green font. Below this, there is a table header with columns: API #, OPERATOR, WELL NAME, WELL STATUS, WELL TYPE, COUNTY, FIELD, DT SPUD, DT COMPLETION, and SECTION. The table contains one row of data with the value '1' in the first column.

The middle selection box allows selection of the filter action criteria. "Begins with" is generally the most useful filter action since only a portion of the filter parameter is required.



This shot shows the filter of “Operator” Begins with “Headington”. To apply the filter click the “Search” button located to the right of the filter criteria box. In this example a list of wells with Headington as the operator will be returned.

The screenshot shows the 'Data Miner V2' web application in a Windows Internet Explorer browser. The address bar displays the URL: <http://www.bogc.dnrc.mt.gov/MBOGCDotNET/frmFilterNavigation.aspx>. The navigation menu includes Home, GIS, Wells, Production, UIC, Leases, Statistics, CBM, Board Orders, Reference, and Admin. The 'Wells' section is active. The filter criteria are set to 'Operator' and 'Like Headington%'. The 'Search' button is visible. The 'Current Data Filter' is 'Operator Like Headington%'. The 'Export' options are Excel, Text, Print, and Help. The 'Wells' section title is displayed in green. Below the title, a table is displayed with the following columns: API #, OPERATOR, WELL NAME, WELL STATUS, WELL TYPE, and COUNTY. The table contains 25 rows of data.

API #	OPERATOR	WELL NAME	WELL STATUS	WELL TYPE	COUNTY
25-083-21924-00-00	Headington Oil Company LLC	4-J Ranch 14X-33	Expired Permit	Oil	Richland
25-083-21930-00-00	Headington Oil Company LLC	4-J Ranch 24X-31	Expired Permit	Oil	Richland
25-083-22095-00-00	Headington Oil Company LLC	4-J Ranch 44X-27	Producing	Oil	Richland
25-083-21303-00-00	Headington Oil Company LLC	Albin 1	Producing	Oil	Richland
25-083-22191-00-00	Headington Oil Company LLC	Albin 13X-33	Producing	Oil	Richland
25-083-22265-00-00	Headington Oil Company LLC	Albin 24X-28	Producing	Oil	Richland
25-083-21863-00-00	Headington Oil Company LLC	Albin 31X-28	Producing	Oil	Richland
25-083-21937-00-00	Headington Oil Company LLC	Albin Farms 31X-31	Producing	Oil	Richland
25-083-21972-00-00	Headington Oil Company LLC	Albin Farms 34X-32	Producing	Oil	Richland
25-083-22253-00-00	Headington Oil Company LLC	Atchison 42X-4	Producing	Oil	Richland
25-083-22123-00-00	Headington Oil Company LLC	Bahls 24X-11	Producing	Oil	Richland
25-083-21920-00-00	Headington Oil Company LLC	Bahls 31X-14	Expired Permit	Oil	Richland
25-083-22004-00-00	Headington Oil Company LLC	Bahls 34X-11	Producing	Oil	Richland
25-083-21918-00-00	Headington Oil Company LLC	Bahls Trust 31X-11	Expired Permit	Oil	Richland
25-083-21758-00-00	Headington Oil Company LLC	Bakken 22-2	P&A - Approved	Oil	Richland
25-083-21329-00-00	Headington Oil Company LLC	Bakken 31-11	P&A - Approved	Oil	Richland
25-083-22133-00-00	Headington Oil Company LLC	Blackstone 24X-3	Producing	Oil	Richland
25-083-21119-00-00	Headington Oil Company LLC	BN 21X-25	P&A - Approved	Oil	Richland
25-083-21878-00-00	Headington Oil Company LLC	BN 21X-25R	Abandoned - Unapproved	Oil	Richland
25-083-21978-00-00	Headington Oil Company LLC	BN 21X-9	Expired Permit	Oil	Richland

Scroll bars at the bottom and right sides of the data screen are used to move through the data view. The applied filter is shown below the filter boxes. In the example the filter that was passed to the data has the form Operator Like 'Headington%'. The filter box itself is cleared and a new filter could be applied.

Clicking on a column name within the data grid once will sort the returned data in ascending order, and a second click on the name will sort the data in descending order. The screen below shows the results from the filter above after the column heading “WELL STATUS” was clicked once. The data are now sorted by the well status.

The screenshot shows the 'Data Miner V2' application in a Windows Internet Explorer window. The address bar displays 'http://www.bogc.dnrc.mt.gov/MBOGCdotNET/fmFilterNavigation.aspx'. The navigation menu includes Home, GIS, Wells, Production, UIC, Leases, Statistics, CBM, Board Orders, Reference, and Admin. The 'Wells' tab is selected. The 'Current Data Filter' is set to 'Operator Like 'Headington%'. The table below lists wells sorted by status, with 'Abandoned - Unapproved' at the top.

API #	OPERATOR	WELL NAME	WELL STATUS	WELL TYPE	COUNTY
25-083-21878-00-00	Headington Oil Company LLC	BN 21X-25R	Abandoned - Unapproved	Oil	Richland
25-083-22240-00-00	Headington Oil Company LLC	Rau 11X-25	Abandoned - Unapproved	Oil	Richland
25-083-21436-00-00	Headington Oil Company LLC	Steffan 33-27	Active Injection	Injection - Disposal	Richland
25-083-21924-00-00	Headington Oil Company LLC	4-J Ranch 14X-33	Expired Permit	Oil	Richland
25-083-21930-00-00	Headington Oil Company LLC	4-J Ranch 24X-31	Expired Permit	Oil	Richland
25-083-21920-00-00	Headington Oil Company LLC	Bahls 31X-14	Expired Permit	Oil	Richland
25-083-21918-00-00	Headington Oil Company LLC	Bahls Trust 31X-11	Expired Permit	Oil	Richland
25-083-21978-00-00	Headington Oil Company LLC	BN 21X-9	Expired Permit	Oil	Richland
25-083-22456-00-00	Headington Oil Company LLC	Candee 44X-6	Expired Permit	Oil	Richland
25-083-21974-00-00	Headington Oil Company LLC	Childers 21X-11	Expired Permit	Oil	Richland
25-083-22273-00-00	Headington Oil Company LLC	Christiansen 41X-9	Expired Permit	Oil	Richland
25-083-21926-00-00	Headington Oil Company LLC	Goss 34X-26	Expired Permit	Oil	Richland
25-083-21934-00-00	Headington Oil Company LLC	Gunderson 31X-34	Expired Permit	Oil	Richland

Data returned to application is divided into separate pages, each with a specific number of records. If more records are returned than allowed under the allocated page size numbers indicating the available pages appear at the top and bottom of the data form as shown below.

The screenshot shows the 'Data Miner V2' application in a Windows Internet Explorer window. The address bar displays 'http://www.bogc.dnrc.mt.gov/MBOGCdotNET/fmFilterNavigation.aspx'. The navigation menu includes Home, GIS, Wells, Production, UIC, Leases, Statistics, CBM, Board Orders, Reference, and Admin. The 'Wells' tab is selected. The 'Current Data Filter' is set to 'Operator Like 'Encore%'. The table below lists wells, and the page numbers 1 through 9 are displayed at the top of the data area.

API #	OPERATOR	WELL NAME	WELL STATUS	WELL TYPE	COUNTY
25-025-21029-00-00	Encore Operating LP	Cabin Creek 44X-20 WI	Abandoned - Unapproved	Injection, EOR	F
25-041-23142-00-00	Encore Operating LP	Donoven 1-32-35-12	Abandoned - Unapproved	Dry Hole	Hi
25-021-05047-00-00	Encore Operating LP	Gas City A 31-28	Abandoned - Unapproved	Injection - Disposal	D
25-015-21800-00-00	Encore Operating LP	Gasvoda 1-34-25-15	Abandoned - Unapproved	Dry Hole	Cl
25-015-21802-00-00	Encore Operating LP	IX Ranch 1-18-26-15	Abandoned - Unapproved	Dry Hole	Cl
25-015-21801-00-00	Encore Operating LP	IX Ranch 1-5-26-15	Abandoned - Unapproved	Dry Hole	Cl
25-041-23222-00-00	Encore Operating LP	Kline 1-2-33-12	Abandoned - Unapproved	Dry Hole	Hi

This screen shot shows that the filter has returned multiple pages of data as indicated by the numbers 1 through 9 at the top of the data area. Clicking on one of the page numbers will advance the data view to that page. (Sorting by column heading is not affected by pagination and all returned data is subject to the sorting parameter regardless of the number of pages.)



Forms within the system are of basically two types, the datasheet form shown in the previous example of filtering and a more complex form that allows for a advanced method of data viewing. The “Search Wells” form will be used to show the basic mechanics of this form type.

This is the “Search Wells” form opened without a filter. When a filter is applied to this form a list of wells will be aligned vertically in the box located along the left side of the data area. When a well is selected from this list the corresponding data will be shown in the data area at the center of the screen.

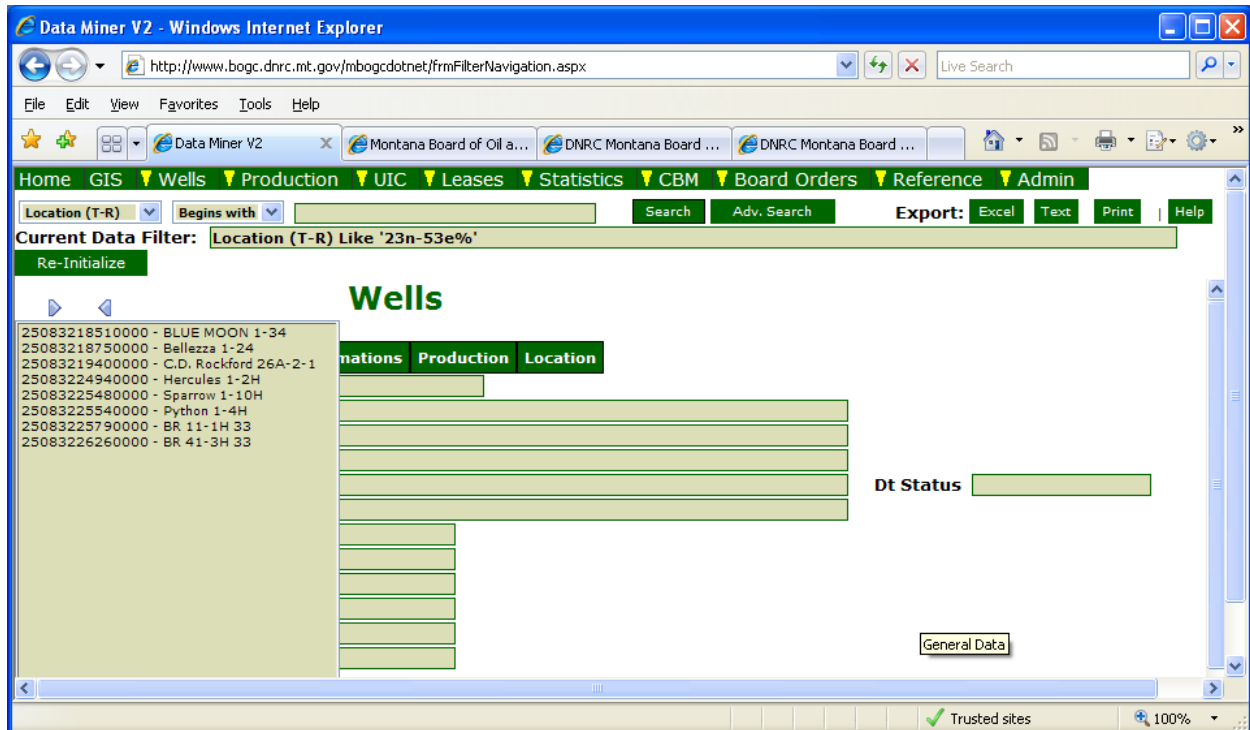
This specific form has 5 data types that can be displayed by clicking on the “General”, “History”, “Formations”, “Production”, or “Location” tabs located near the top of the data area.

For this example the filter option of location by township and range will be used:

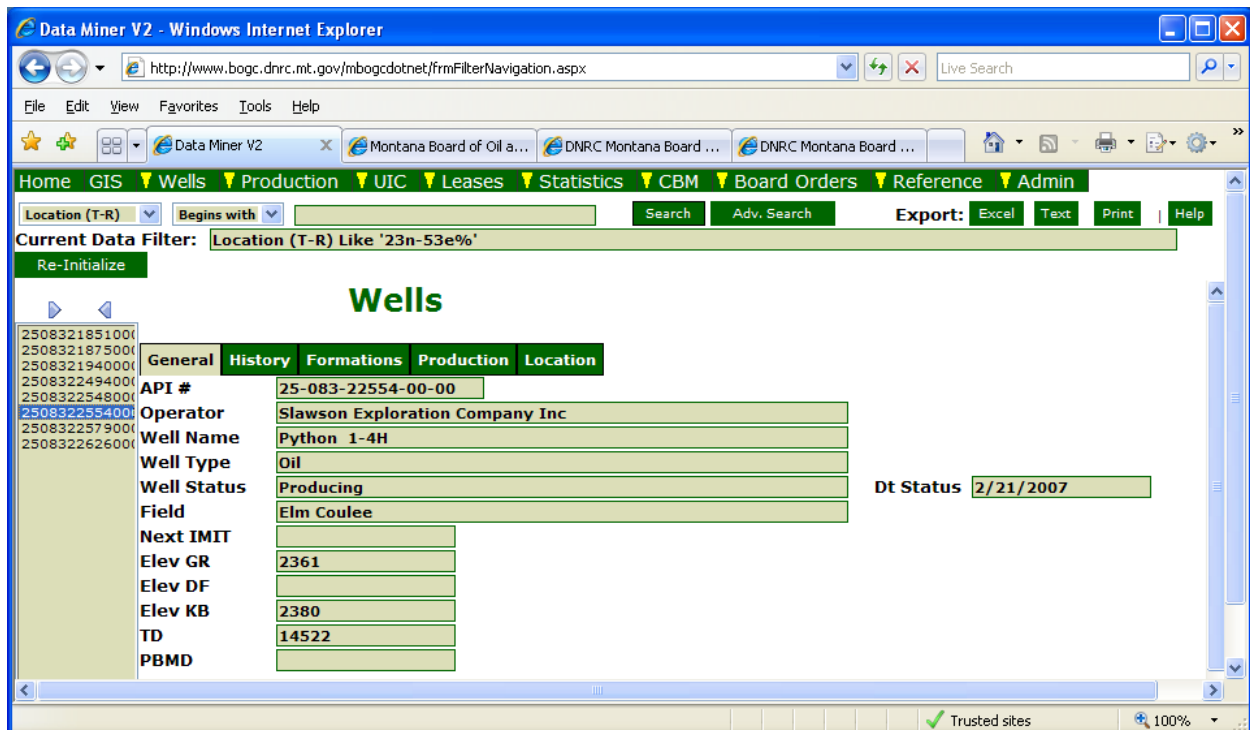
The screenshot shows the 'Data Miner V2' web application in Internet Explorer. The browser address bar displays 'http://www.bogc.dnrc.mt.gov/mbogcdotnet/firmFilterNavigation.aspx'. The application has a navigation menu with options: Home, GIS, Wells, Production, UIC, Leases, Statistics, CBM, Board Orders, Reference, and Admin. The 'Wells' section is active. A left sidebar contains a list of fields: API#, Operator, Well Name, Well Type, Well Status, Field, Next IMIT, County, Location (T-R), Location (T-R-S), Section, Slant, TD, District, Next Inspection, and Lease #. The 'Location (T-R)' field is selected. The main area is titled 'Wells' and shows a 'No Current Filter Applied' message. Below this, there are tabs for General, History, Formations, Production, and Location. The 'General' tab is active, displaying a form with fields for API #, Operator, Well Name, Well Type, Well Status, Field, Next IMIT, Elev GR, Elev DF, Elev KB, TD, and Dt Status. The 'Dt Status' field is currently empty.

The screenshot shows the 'Data Miner V2' web application with a filter applied. The 'Location (T-R)' dropdown is set to 'Location (T-R) Like '23n-53e%'. The 'Current Data Filter' section shows 'Location (T-R) Like '23n-53e%'. A 'Re-Initialize' button is present. The left sidebar shows a list of API numbers: 250832185100I, 250832187500I, 250832194000I, 250832249400I, 250832254800I, 250832255400I, 250832257900I, and 250832262600I. The 'Wells' form is displayed with the 'General' tab active, showing the same fields as the previous screenshot. The 'Dt Status' field is still empty.

“Location (T-R) Begins with” is selected and the location is entered as 23n-53e in the filter box, which returns a list of wells in the vertical panel along the left side of the form. Clicking the “>” at the top of the list will expand the box to show a full API # and well name, as shown in the next screen shot.



When a well is selected on the list the data matching that well will be shown in the data area.



The following pages show the data associated with the “History”, “Formations”, “Production” and “Location” tabs.

Data Miner V2 - Windows Internet Explorer

http://www.bogc.dnrc.mt.gov/mbogcdotnet/fmFilterNavigation.aspx

File Edit View Favorites Tools Help

Home GIS Wells Production UIC Leases Statistics CBM Board Orders Reference Admin

Location (T-R) Begins with Search Adv. Search Export: Excel Text Print Help

Current Data Filter: Location (T-R) Like '23n-53e%'

Re-Initialize

## Wells

General	History	Formations	Production	Location
API #	TYPE WORK	DT EFFECT	COMMENT	
25-083-22554-00-00	Date Well Completed	11/27/2006		
25-083-22554-00-00	Date Well Spudded	10/17/2006	Pioneer 44	
25-083-22554-00-00	Permit to Drill, Horizontal	10/16/2006		

Trusted sites 100%

Data Miner V2 - Windows Internet Explorer

http://www.bogc.dnrc.mt.gov/mbogcdotnet/fmFilterNavigation.aspx

File Edit View Favorites Tools Help

Home GIS Wells Production UIC Leases Statistics CBM Board Orders Reference Admin

Location (T-R) Begins with Search Adv. Search Export: Excel Text Print Help

Current Data Filter: Location (T-R) Like '23n-53e%'

Re-Initialize

## Wells

General	History	Formations	Production	Location
API #	FORMATION	TOP	COMMENT	
25-083-22554-00-00	Greenhorn	4032		
25-083-22554-00-00	Dakota	4812		
25-083-22554-00-00	Swift	5490		
25-083-22554-00-00	Piper Formation	6032		
25-083-22554-00-00	Spearfish Formation	6368		
25-083-22554-00-00	Tyler	6798		
25-083-22554-00-00	Kibbey	7284		
25-083-22554-00-00	Charles	7420		
25-083-22554-00-00	Mission Canyon	8178		
25-083-22554-00-00	Lodgepole	8697		
25-083-22554-00-00	Bakken	9411		

Trusted sites 100%

Data Miner V2 - Windows Internet Explorer

http://www.bogc.dnrc.mt.gov/mbogcdotnet/fmFilterNavigation.aspx

File Edit View Favorites Tools Help

★
★
☰
Data Miner V2
Montana Board of Oil a...
DNRC Montana Board ...
DNRC Montana Board ...
🏠
📄
🖨️
🔍
⚙️
↔️

Home
 GIS
 Wells
 Production
 UIC
 Leases
 Statistics
 CBM
 Board Orders
 Reference
 Admin

Location (T-R)
 Begins with
 Search
 Adv. Search
 Export:
 Excel
 Text
 Print
 Help

Current Data Filter: Location (T-R) Like '23n-53e%'

Re-Initialize

### Wells

General	History	Formations	Production	Location		
API #	DT REPORT	FORMATION	LEASE UNIT	BBL OIL COND	MCF GAS	BB
25-083-22554-00-00	1/31/2008	Bakken	7533	1072	1475	585
25-083-22554-00-00	12/31/2007	Bakken	7533	1148	1563	625
25-083-22554-00-00	11/30/2007	Bakken	7533	1171	1669	650
25-083-22554-00-00	10/31/2007	Bakken	7533	1296	1869	706
25-083-22554-00-00	9/30/2007	Bakken	7533	1323	1916	742
25-083-22554-00-00	8/31/2007	Bakken	7533	1557	2124	866
25-083-22554-00-00	7/31/2007	Bakken	7533	1640	2226	871
25-083-22554-00-00	6/30/2007	Bakken	7533	1902	2585	976
25-083-22554-00-00	5/31/2007	Bakken	7533	2329	3199	116
25-083-22554-00-00	4/30/2007	Bakken	7533	2886	3732	147
25-083-22554-00-00	3/31/2007	Bakken	7533	3754	3930	176
25-083-22554-00-00	2/28/2007	Bakken	7533	5230	3717	245
25-083-22554-00-00	1/31/2007	Bakken	7533	3158	1750	221

Trusted sites 100%

Data Miner V2 - Windows Internet Explorer

http://www.bogc.dnrc.mt.gov/mbogcdotnet/fmFilterNavigation.aspx

File Edit View Favorites Tools Help

Home GIS Wells Production UIC Leases Statistics CBM Board Orders Reference Admin

Location (T-R) Begins with Search Adv. Search Export: Excel Text Print Help

Current Data Filter: Location (T-R) Like '23n-53e%'

Re-Initialize

### Wells

General	History	Formations	Production	Location
Slant	Horizontal			
County	Richland			
Location (T-R)	23N-53E			
Section	4			
Twp #	23 N			
Rng #	53 E			
Spot	NE NE			
Ft NS	400 N			
Ft EW	330 E			

API #	WELL SUB	TYPE	MEAS DEPTH	TVD	BH TWP #	BH TWP DIR	BH RNG #	BH RNG DIR
25-083-22554-00-00	Lateral 1	BHL	14522	9401	23	N	53	E
25-083-22554-00-00	Lateral 1	Proposed BHL	13904	9349	23	N	53	E
25-083-22554-00-00	Lateral 2	BHL	13997	9394	23	N	53	E
25-083-22554-00-00	Lateral 2	Proposed BHL	15187	9352	23	N	53	E
25-083-22554-00-00	Lateral 3	BHL	13600	9424	23	N	53	E
25-083-22554-00-00	Lateral 3	Proposed BHL	13797	9404	23	N	53	E

Trusted sites 100%

Data for a different well is displayed by clicking on a well in the selection box located along the left side of the screen. This box can be expanded or shrunk at any time by clicking the "<" or ">" buttons at the top of the list box.

One feature of this application is the ability to pass basic filter parameters from one form to the next *if the parameter in use is applicable to the new form*. The “Search Wells” form with the existing “Location (T-R)” filter will be used to demonstrate how filters are passed to a new form.

The simplest example is to jump from the “Search Wells” form to the “Multiple Well Search – Search Wells” form. Leave the current form as-is and place the mouse cursor on Wells, Multiple Well Search, and Search Wells.

The screenshot shows the 'Search Wells' form in the Data Miner V2 application. The 'Location (T-R)' filter is applied, and the 'Current Data' section shows a list of wells with details for API # 25-083-22626-00-00.

API #	Operator	Well Name	Well Type	Well Status	Dt Status
25-083-2185100					
25-083-2187500					
25-083-2194000					
25-083-2249400					
25-083-2254800					
25-083-2255400					
25-083-2257900					
25-083-2262600	Burlington Resources Oil & Gas Company LP	BR 41-3H 33	Oil	Producing	1/24/2008

The screenshot shows the 'Multiple Well Search - Search Wells' form in the Data Miner V2 application. The 'Current Data Filter' is 'Location (T-R) Like '23n-53%''.

API #	OPERATOR	WELL NAME	WELL STATUS	WELL TYPE	COUNT
25-083-21875-00-00	St. Mary Land & Exploration Company	Bellezza 1-24	Producing	Oil	Richland
25-083-21851-00-00	Vastar Resources, Inc.	BLUE MOON 1-34	Expired Permit	Oil	Richland
25-083-22579-00-00	Burlington Resources Oil & Gas Company LP	BR 11-1H 33	Producing	Oil	Richland
25-083-22626-00-00	Burlington Resources Oil & Gas Company LP	BR 41-3H 33	Producing	Oil	Richland
25-083-21940-00-00	Petro-Hunt, LLC	C.D. Rockford 26A-2-1	Producing	Oil	Richland
25-083-22494-00-00	Slawson Exploration Company Inc	Hercules 1-2H	Producing	Oil	Richland
25-083-22554-00-00	Slawson Exploration Company Inc	Python 1-4H	Producing	Oil	Richland
25-083-22548-00-00	Slawson Exploration Company Inc	Sparrow 1-10H	Producing	Oil	Richland

The Multiple Well / Search Well Screen will open with the same filter applied. Filters will be passed from form to form **only** if the specific filter is applicable to the type of data being displayed on the subsequent form.



For this example, any form and dataset that uses Township and Range as filter criteria will open with the same filter applied. The two screen shots on the next page show production data by location and board orders by T-R when opened with the T-R filter from the previous example.

Due to the type of form being opened the original filter will only populate the list box located on the left side of the data area. One of the entries in this list box has to be selected for data to appear in the main data area.

**Monthly Production By Location**

API #	DT REPORT	FORMATION	CURRENT OPERATOR	WELL NAME
25-083-21875-00-00	2/29/2008	Red River	St. Mary Land & Exploration Company	Bellezza 1-24
25-083-22579-00-00	2/29/2008	Bakken	Burlington Resources Oil & Gas Company LP	BR 11-1H 33
25-083-22626-00-00	2/29/2008	Bakken	Burlington Resources Oil & Gas Company LP	BR 41-3H 33
25-083-21940-00-00	2/29/2008	Red River	Petro-Hunt, LLC	C.D. Rockford 26A-2-

**Board Order Summaries**

Field: Wildcat Richland

Order Type: Spacing

Order Year: 2007

Year & Order #: 2007-199 Spacing

Year & Docket #: 2007-256

Summary: Permanent spacing unit, Bakken Formation, 23N-53E-4: Lots 1, 2, 3, 4, S/2N/2, S/2 (all) (Python 1-4H).

FLD ALL	ID	LOCATION (T-R)	SECTION	SEC ALL	QQQQ	QQQ	QQ	Q	LOT	LOT PT	FT NS
False	7562	23N-53E	4	True							

## Board Order Summary Form

This screen shot shows some of the features of the board order summary form.

The screenshot shows a web browser window titled "Data Miner V2 - Windows Internet Explorer". The address bar displays the URL: <http://www.bogc.dnrc.mt.gov/IMBOGdotNET/firmFilterNavigation.aspx>. The browser has several tabs open, including "Data Miner V2", "Montana Board of Oil and Gas", and "DNRC Montana Board of Oil...".

The application interface includes a navigation menu with links: Home, GIS, Wells, Production, UIC, Leases, Statistics, CBM, Board Orders, Reference, and Admin. Below the menu, there is a "Current Data Filter" section with a dropdown for "Location (T-R)" and a text input field containing "23n-53%". Buttons for "Search", "Adv. Search", "Export: Excel", "Text", "Print", and "Help" are present. There are also buttons for "Re-Initialize" and "Up One Level".

The main content area is titled "Board Order Summaries". It displays a list of orders on the left, including "23N-53E-01 - 2007-285 Spacing", "23N-53E-02 - 2006-456 Spacing", "23N-53E-04 - 2007-199 Spacing", "23N-53E-10 - 2007-194 Spacing", and "23N-53E-10 - 2007-195 Pooling". The selected order is "23N-53E-04 - 2007-199 Spacing".

Details for the selected order are shown on the right, including "Wildcat Richland", "Spacing", "7", "-199 Spacing", and "Year & Docket # 2007-256". A description of the order is provided: "Bakken Formation, 23N-53E-4: Lots 1, 2, 3, 4, (on 1-4H)". A "View Order" link is located on the right side.

At the bottom, there is a table with the following columns: LOCATION (T-R), SECTION, SEC ALL, QQQQ, QQQ, QQ, Q, LOT, LOT PT, FT NS. The table contains one row with the following data: 23N-53E, 4, True, , , , , , , .

Expanding the list box (click ">") will show the township, range, and section, the order year and number, and the type of order. In this example, all of the orders applicable to the township and range are permanent spacing orders.

Clicking on the "View Order" link on the right side of the screen will open a new window with the order shown.

***A pdf viewer is required to view orders, and a pop-up blocker may prevent opening of the display window.***



# Additional Features of the Online Data Application

## Advanced Search

The screenshot shows the 'Data Miner V2' application in a Windows Internet Explorer browser. The address bar displays the URL: <http://www.bogc.dnrc.mt.gov/MBOGCdotNET/frmFilterNavigation.aspx>. The application has a menu bar with options: Home, GIS, Wells, Production, UIC, Leases, Statistics, CBM, Board Orders, and Reference. Below the menu bar, there is a search section with a dropdown for 'API#' and a text input field for 'Begins with'. There are buttons for 'Search' and 'Adv. Search'. To the right of these buttons are 'Export' options: Excel, Text, Print, and Help. Below the search section, it says 'Current Data Filter: No Current Filter Applied' with a 'Re-Initialize' button. The main content area is titled 'Wells' and has a tabbed interface with 'General', 'History', 'Formations', 'Production', and 'Location'. The 'General' tab is active, showing a list of fields: API #, Operator, Well Name, Well Type, Well Status, Field, Next IMIT, Elev GR, Elev DF, Elev KB, TD, and PBMD. Each field has a corresponding text input field. To the right of the 'Well Status' field is a 'Dt Status' field. The status bar at the bottom indicates 'Trusted sites' and '100%' zoom.

To perform an advanced search click the button labeled “Adv. Search”. This opens additional filtering options based upon the “And” and “Or” buttons.

This screenshot shows the 'Data Miner V2' application with the 'Advanced Search' interface. The 'Adv. Search' button from the previous screen has been clicked, and the search section now includes additional buttons: 'Simple Search', 'And', 'Or', and 'Apply And/Or'. The 'Current Data Filter' section still shows 'No Current Filter Applied' with a 'Re-Initialize' button. The 'Wells' section remains the same, with the 'General' tab active and the same list of fields for searching. The status bar at the bottom indicates 'Done', 'Trusted sites', and '100%' zoom.

In this example the first filter is set to Operator Begins with Encore:

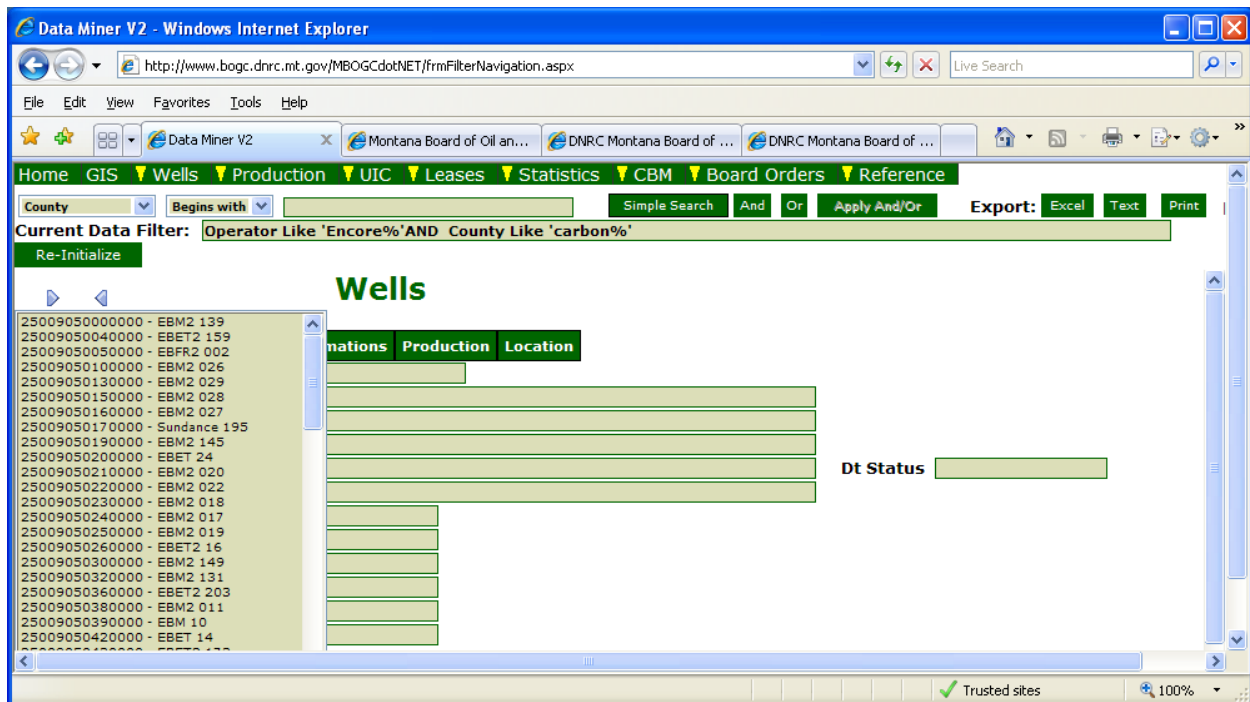
The screenshot shows the 'Data Miner V2' web application in a Windows Internet Explorer browser. The address bar displays the URL: <http://www.bogc.dnrc.mt.gov/MBOGCdotNET/frmFilterNavigation.aspx>. The navigation menu includes: Home, GIS, Wells, Production, UIC, Leases, Statistics, CBM, Board Orders, and Reference. The 'Wells' section is active. Below the navigation menu, there are input fields for 'Operator' (set to 'Encore') and 'Begins with' (set to 'Encore'). Buttons for 'Simple Search', 'And', 'Or', 'Apply And/Or', and 'Export' (with sub-buttons for 'Excel', 'Text', and 'Print') are visible. The 'Current Data Filter' status is 'No Current Filter Applied'. The main content area is titled 'Wells' and has tabs for 'General', 'History', 'Formations', 'Production', and 'Location'. The 'General' tab is selected, showing a list of well attributes: API #, Operator, Well Name, Well Type, Well Status, Field, Next IMIT, Elev GR, Elev DF, Elev KB, TD, and PBMD. Each attribute has a corresponding input field. To the right of the 'Well Status' field is a 'Dt Status' field. The status bar at the bottom indicates 'Trusted sites' and '100%' zoom.

After entering the first filter criteria click “And” and enter a second filter criterion. In this example the second filter to be applied is “County Begins with Carbon”.

This screenshot shows the same 'Data Miner V2' web application, but with additional filter criteria. The 'County' dropdown is now set to 'Carbon'. The 'Current Data Filter' status has changed to 'Operator Like 'Encore%' AND'. The 'And' button in the search bar is highlighted, indicating it was clicked to combine the filters. The rest of the interface, including the 'Wells' section and the 'General' tab, remains the same as in the previous screenshot. The status bar at the bottom still shows 'Trusted sites' and '100%' zoom.

To apply the combined filter click on the “Apply And/Or” button.

In this example, the Search Wells list box is now populated with all wells matching the filter “Operator Like Encore AND County Like carbon” to return all the wells operated by Encore that are located in Carbon County.



Additional compound filters using the “Or” option or combinations of “And” and “Or” are possible.

To return to a single-parameter search click the button labeled “Simple Search”. As long as “Adv. Search” is selected the filtering mechanism expects a first entry followed by “And” or “Or” and at least one additional filtering parameter.

## Township – Range – Section Filter

Although most forms allow filtering to township and range, an option has been added to allow filtering directly to township, range, and section. Used in combination with the “Begins with” parameter this makes the township-range filter unnecessary.

This is a screen shot of the multiple well / search well form with a selected filter of “Location (T-R-S) Like '23n-54e-16%'”, and it shows two wells located within Section 16.

The screenshot shows the Data Miner V2 interface in Internet Explorer. The search filter is set to "Location (T-R-S) Like '23n-54e-16%'". The results table shows two wells:

API #	OPERATOR	WELL NAME	WELL STATUS	WELL TYPE	COUNTY	FIELD	DT SPUD
25-083-22674-00-00	Petro-Hunt, LLC	State 16B-4-1	Producing	Oil	Richland	Lane	8/4/2007
25-083-21163-00-00	Anschutz Corporation, The	STATE 923-1	P&A - Approved	Dry Hole	Richland	Enid, North	12/22/1976

This screen shows the same T-R-S filter but with only the township and range entered. Since the filter is based upon “Begins with” all of the wells in the township and range are returned.

The screenshot shows the Data Miner V2 interface in Internet Explorer. The search filter is set to "Location (T-R-S) Like '23n-54e%'". The results table shows 10 wells:

API #	OPERATOR	WELL NAME	WELL STATUS	WELL TYPE	COUNTY	FIELD
25-083-22012-00-00	Petro-Hunt, LLC	AgAmerica 2B-1-1H	Producing	Oil	Richland	Elm
25-083-22542-00-00	Continental Resources Inc	Azalea 1-6H	Producing	Oil	Richland	Elm
25-083-22151-00-00	Petro-Hunt, LLC	Bell 12A-2-1H	Producing	Oil	Richland	Elm
25-083-22495-00-00	Continental Resources Inc	Bettsye 1-8H	Producing	Oil	Richland	Elm
25-083-21644-00-00	Pride Energy Company	BN 10X-23	Producing	Oil	Richland	Enic
25-083-21609-00-00	Pride Energy Company	BN 23-1	Shut In	Oil	Richland	Enic
25-083-21794-00-00	Pride Energy Company	BN 23-1X	Shut In	Oil	Richland	Enic
25-083-21883-00-00	Armstrong Operating, Inc.	BR 1-21	Producing	Oil	Richland	Lan

## Exporting Data



**Wells**

1	API #	OPERATOR	WELL NAME	WELL STATUS	WELL TYPE	COUNTY	
	25-083-22012-00-00	Petro-Hunt, LLC	AgAmerica 2B-1-1H	Producing	Oil	Richland	Elm
	25-083-22542-00-00	Continental Resources Inc	Azalea 1-6H	Producing	Oil	Richland	Elm
	25-083-22151-00-00	Petro-Hunt, LLC	Bell 12A-2-1H	Producing	Oil	Richland	Elm
	25-083-22495-00-00	Continental Resources Inc	Bettsye 1-8H	Producing	Oil	Richland	Elm
	25-083-21644-00-00	Pride Energy Company	BN 10X-23	Producing	Oil	Richland	Enic
	25-083-21609-00-00	Pride Energy Company	BN 23-1	Shut In	Oil	Richland	Enic
	25-083-21794-00-00	Pride Energy Company	BN 23-1X	Shut In	Oil	Richland	Enic
	25-083-21883-00-00	Armstrong Operating, Inc.	BR 1-21	Producing	Oil	Richland	Lan

There are two export options in the application, export to “Excel”, or export to “Text”. The ability to export data to an outside application was the primary goal of application development.

Pop-up blockers will stop exports, and security settings specific to the user’s computer may block exporting to Microsoft Excel.

- Before attempting an export to Excel try to export to text by clicking the “Text” button. To date, the only thing that is known to stop an export to text is a pop-up blocker. Pop-up blockers are present within Internet Explorer, associated with the Google toolbar, 3rd-party security or firewall software, and may be included in software provided by an internet service provider.
- An indication of either a pop-up blocker or other security setting that could impede export of data is an audible click or beep after an export button is clicked.
- Pop-up blockers will have to either be configured to allow pop-ups from the Montana Board of Oil and Gas website or disabled for either of the export options to perform.
- If clicking export to text works and export to Excel still doesn’t work, likely with an audible “bleep”, hold down the control (ctrl) key until something appears on the screen. Usually a new window will open with an option box allowing the selection of either “Open” or “Save”.
- The larger the dataset being returned, the longer the control key needs to be held down for the export to Excel.
- Always look for other message windows that might open during an export to Excel. More recent versions of Excel, and especially those running under Vista, may require additional security confirmation before the data will be transferred to a local computer.

## Printing

Although a button for printing is available on nearly all forms, most users will not be satisfied with the resulting print-out due to the number of data elements that are included in the returned data sets.

One method to capture data in a printable format is to use a third-party application that prints to a pdf file and select an over-sized paper for output. Forms such as the Multiple Well Search / Well Search are printable on an ANSI D (22" X 34") paper or image size.

## Advanced Filtering

If only a portion of a data field used for filtering is known, entering a "%" before the partial text string is the equivalent to a "contains" filter. For example, entering "%eading" (no quotes) when filtering to a company and using the "Begins with" action would return every company in the database that has the letters "eading" somewhere within the company name.

Entering only "%" in a filter box will also return all records from the underlying data table but it is not recommended that this be done due to the potentially large number of records that will be transferred, especially over a slow internet connection.